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Ambiguous Bodies, Biopower and the Ideologies of Science Fiction

Contemporary Hollywood film narrates the fear of monstrous science; attending to the modulations of medicine, capital and the body. The filmic body is employed to illustrate the power of the new biotechnologies to create and sustain life and the new sets of social relations which are a consequence of the marriage of capital and medicine. In the Hollywood film, persons who do not fit the ideal healthy persona have a moral duty to pursue repair and transformation. Constructed as inherently lacking, the unhealthy body becomes a repository for social anxieties about control and vulnerability, vis-à-vis the enormous and exponentially expanding science and technology fields. Hierarchies of embodiment are played out on the Big Screen as imperfect bodies are excluded from public life, power and status and urged to strive for "optimization". Late modern societies present the possibility of new technologies which have the potential to radicalize bodies. However, these potential modulations are ultimately derived from a set of ideologies around the body and the power of the individual to enact an individualized solution. Contemporary narratives circulate around ownership of capital and the price of "repair." This marriage of science and capital in popular narratives may be indicative of concerns for our future, as the power to make and repair life seems to rest increasingly in the hands of an elite.

key words: Science fiction, Foucault, biopower, biotechnology, ideology

Introduction

Contemporary Hollywood film articulates a fascination with science. Oscillating between ingenious and miraculous, science is presented as the beacon of hope for humanity’s future, a generous and available panacea to all of our myriad “ills.” Complicit with and feeding into the public’s vision of science and its scope, popular Hollywood films, particularly of the science fiction genre, are informed by deep-rooted dominant ideologies of the body. In this age of physical radicalization; transplants, artificial organs and cloning; fantasies of modifying the body emerge with increasing frequency (Rose 11). Optimization of the self is now inculcated in public life. Cultural vehicles such as film are increasingly seizing the possible modifications of the body as a narrative device for exploring this optimization vis-a-vis the advent of biotechnology. The creation of “flesh” and of “almost real” life is depicted as the natural evolution of a progressive science. Medical science begins to look like an art form; bodies are made beautiful and more highly functioning while science is seen as the repository of unending possibilities. It is this state

1 Elsewhere I have used Avatar (Cameron 2009) as an exemplar of this form of optimization and the problematics of “fixing” disability. See Flynn “Equality, Culture and Representation: Considerations on the Film Industry”; “‘Get Your Legs Back’: Avatar (2009) and the Re-booting of American Individualism”; and “New Poetics of the Film Body: Docility, Molecular Fundamentalism and Twenty First Century Destiny.”
of humanity and its jagged edges that finds articulation in current popular film narratives. Contemporary public life appears to depend on this compulsory optimization.

The planetary reach of the Hollywood film industry makes it a global purveyor of ideologies, purporting to reflect reality:

What the camera in fact registers is the vague, unformulated, untheorized, unthought-out world of the dominant ideology. Cinema is one of the languages through which the world communicates to itself. They constitute its ideology for they reproduce the world as it is experienced when filtered through the ideology. (Easthope 46)

Film therefore enacts prevalent ideologies by reconstituting the audience’s notion of themselves and, simultaneously, ideology “conditions” films. Therefore, though film is a material product, it is also an ideological product. Disability theorists have examined the relationship between hegemonic ideologies and such powerful economic forces, identifying a set of ideologies, namely individualism, normalization and medicalization, which together are central to ableism. An examination of each of these ideologies illustrates their interrelation and their relationship to the science which purports to solve all problems. This set of ideologies can be seen to inform the manner in which disability is represented and simultaneously the manner in which science is made all-powerful. Popular films Repo Men and Ex Machina are employed within this paper to expose how these ideologies are enacted on-screen.

**Individualism, Normalization and Medicalization**

Oliver suggests that the ideologies of individualism, normalization and medicalization are linked to capitalism’s rise and have shaped contemporary understandings of disability (4). In the twenty first century, popular narratives acknowledge the relationship between capital and health; the onus is on the individual to get well and stay well through whatever individualistic solutions are possible. Individualism is an ideology which emphasizes the duty of each individual to further their own interests, without taking the interests of society into consideration. Social critics posit that individualism justifies inequalities by suggesting that barriers to economic success are due to the psyches of individuals, rather than to social structures (Greene 117). Encouraging the autonomy of the individual, individualism assumes each person is capable of rational and vigorous self-improvement. Rather than being static, economic, political and cultural shifts continuously shape the notion of individualism (Greene 118). Disparate threads of individualism may be identified that still share common structural antecedents and over-arching outcomes. In the Marxist sense, individualism buttresses capitalism by fostering self-interest; inspiring the masses to hard work, while encouraging them to focus on their own material desires. The assumption that every person has the ability to improve their social position leaves no room for those who may need care or assistance and perpetuates the myth of self-sufficiency, constructing some as dependent and others as autonomous (White and Tronto 116). A person’s ill health or disability, then, is his or her own responsibility, and he or she ought to exercise their right to improve their situation, rather than seeking the assistance or recognition of society.

Hollywood blockbusters are particularly interested in ideologies of the American life: “woven into American culture and social institutions, individualism often symbolizes the freedom of the American way of life” (Greene 117). The ideology of American individualism which is tied up with American Exceptionalism and the notion of citizenship, is bound up with
the notion of an individualist egalitarian democracy where each citizen has the ability to improve their social standing by virtue of hard work (Garland-Thomson 41).

Furthermore, in this paradigm, each citizen is a microcosm of the American nation (Garland-Thomson 43). “Good” citizens, then, are those who enact the “correct” amount of self-drive and determination, to improve their own position and the overall position of the nation:

A well-regulated self thus contributes to a well-regulated nation. However, [that depends] upon a body that is a stable, neutral instrument of the individual will. It is this fantasy that the disabled figure troubles. (Garland-Thomson 42)

The economic sphere of course, is fraught with competition, and celebrates the “survival of the fittest” which literally and figuratively places physically imperfect people at a disadvantage. The notion extolled by individualism whereby each citizen has the same potential for success, is predicated on the assumption that every citizen has the same material condition. Individualism, therefore, has a predilection for “normal” bodies and so seeks to reject or “normalize” those outside the realm of what it considers normal.

“Normal,” a construct from the nineteenth century, is an ideal of the average man, without deviations, who can be assimilated seamlessly into the masses (Davis 6). The rise of professions, particularly the medical profession, necessitated a manner of measuring and evaluating; an effective calculus of mankind, which would not easily accommodate variations. “Normal” persons, therefore, are ascribed a hegemonic position and this hegemony asserts itself in the celebration of the normal, the reiteration of the dominance of the majority who are non-disabled. “In modern society the tyranny of the norm makes extraordinary bodies into freakish bodies, which both compel and repel normate sensibility” (Garland-Thomson 137). The forms of agency and subjectivity available to those who are outside the hegemonic norm are limited; while they are invisible they are also stereotyped, as dominant groups project their own experiences as representative of all humanity and other groups are excluded. Popular contemporary film, contributing to ideologies of health, social expectation and citizenship, recirculates oppressive discourses of the body which place the burden of repair and improvement on individuals.

The pervasive theme of medical science in contemporary narratives illustrates our current cultural reverence of medicalization. Medicalization is the ideology which sustains the kudos of medical science and the inherent professionalism within it. The medical experts are seen to have superior qualifications and knowledge which supersede any individual’s thoughts about their own medical issues. The ideology of medicalization sustains the power of medical professional opinion, medical assessment, intervention and treatment. It is predicated on the idea that all persons must be made “normal” as much as possible, and “fixed” when possible, through a process of medical intervention. Medical intervention can be traced to the eighteenth century and the rise of medical science. The work of Foucault is useful in analyzing this development of professional discourse stemming from the examination and categorization which form part of the medical approach to ability and health. Drawing on the work of Foucault, the “discursive practices” of knowledge are not independent of the objects that are studied, and must be understood in their social and political contexts. In the light of post-structuralism, nature and culture do not occupy separate spaces. The sociology of the body as well as cultural studies have facilitated the ideas of Foucault in developing new insights into body theory.
The Birth of the Clinic

In *The Birth of the Clinic*, Foucault pinpoints the end of the eighteenth century as the time at which modern biomedicine was born, and thus the distinction between the normal and the pathological was formed. By the end of the nineteenth century, confinement, institutionalization and dependency had become synonymous with ill-health, madness and disability. Thus Foucault's work on social control is helpful in analysing the manner in which we have a duty to self-regulate and optimize. For Foucault, power is inseparable from knowledge, and so the medical gaze is a technology of power, producing both. Foucault’s post-structuralist analysis of the creation of the conditions which have allowed medical ideologies to thrive also illuminates the conditions under which science has become “reified” by modern culture and allowed in effect, to become “monstrous.” Modern perceptions of the body may be effectively traced back to the late eighteenth century, when medical practice began to examine bodies in order to classify them:

In the eighteenth century, the fundamental act of medical knowledge was the drawing up of a map: a symptom was situated within a disease, a disease in a specific ensemble, and this ensemble in a general plan of the pathological world. (Foucault 13)

Foucault argues that the materiality of the body cannot be dissociated from the historical practices that objectivise it (Hughes and Patterson 333). The patient became the passive subject of the medical gaze, subjected to analysis and classification. Foucault maintained that this eighteenth century clinical discourse was the basis for a new regime of power, which he called “biopower”. Foucault’s biopower refers to the tendency of relatively recent forms of power/knowledge to work toward an increasingly comprehensive management of life; both the life of the person and consequentially the nation. In *The Birth of the Clinic*, Foucault argues that the dividing practices of the nineteenth century clinics affected the treatment of the body by professionals. Categorization, segregation and manipulation of subjects were objectifying procedures, through which subjects become attached to a personal and social identity. Foucault considered normalization to be the cornerstone of biopower. Normalizing technologies, (practices of bodily reconstruction, analysis and rehabilitation as well as self-help groups, fitness regimes etc.) perform disciplinary functions, encouraging subjects to identify themselves in ways that make them governable. Through the work of Foucault, then, it is apparent that from the eighteenth century, classification and governability have gone hand-in-hand. The scientific classification of persons has been seen as the primary determining factor rather than their socially-created identity. The power of science, therefore, has grown exponentially to the point where it is celebrated and glorified by mass media. Seen to be a rational repository of truth and reason, it is given the task of defining our levels of humanity, orderliness and compliance. In this way it is also “monstrous”; its growth is exponential, as is its power.

Contemporary popular film regularly displays the powers of science and technology, labelling it as “rational” and imbuing it with largesse. Fed by dominant ideologies of health and the body, popular film fails to attend to the evolving subtleties that late modern societies create in relation to health and fails to address the ever more complex nuances of the body in relation to other spheres such as biotechnology. In this way, a “monstrous science” is articulated in film; a science which has powers to “fix” and even create humans. Such science is not a field concerned with rights or equality; rather it is concerned only with its own growth and the perceived “optimization” of human life.
Science Fiction Film and Monstrous Science

Popular film, science fiction in particular, enacts our fascination and our fear of this monstrous science. Through science fiction narratives we can grapple with scientific advances and work through the underlying fears about its potential power. These narratives feature imagined futures, replete with all that science has to offer and which we imagine it will one day offer. In science fiction films, medical technology and scientific advances offer “perfect” bodies, in this way reconstituting the dominant ideologies of medicalization, normalization and individualism. The constant drive toward the optimization of the body, replacement body parts, assisted conception, gene therapy and assorted other “procedures” are now so commonplace that science and technology are an everyday part of life and the aging process. So much of social interaction, education, employment, even leisure, depends on the categorization of people (healthy/unhealthy, non-disabled/disabled, old/young, fit/unfit) that the scientific intervention that is available or unavailable to us is more and more relevant (Rose 17). These concerns find articulation in the mass market media, in particular blockbusters that attend to the concerns of the masses.

Science fiction is often concerned with a dystopian future, a world far from ideal where traditional values are collapsing. This world of the future is tightly controlled by superpowers that, through their accumulation of vast wealth, are in a position of supreme power and influence which affects the average citizen, limiting his freedom and dictating his lifestyle. Science fiction seeks to produce imaginary futures where the breakdown of society is alarming and the gap between the powerful and the powerless is a vast and ever-stretching chasm. Film is particularly well suited to the portrayal of science fiction; the distortion of ordinary colors, forms and landscapes may be made vivid, while 3D allows the viewer to “enter” the fantastical world of the future. The new technologies of late capitalism, the transport systems, the technological aids, the modified bodies, etc. are all easily expressed and made real.

The intersection of the body and technology is a recurrent trope of science fiction. The body is remade (Robocop, 2014), reconfigured (Transcendence, 2014), remodelled (Iron Man, 2008) and transmuted (The Fly, 1986). As medical technology and genetic engineering have developed, so have the futuristic ideas of a society where “disability” is eradicated by the intervention of technology to cure and treat impairment (Reeve 100). In science fiction films, medical science transforms the body in a most monstrous way; scooping out the apparent weakness of the human form in order to implant a mechanical component. As Shapiro remarks:

There is no getting away from the monstrosity of the body, or from the violence with which it is transformed, because there is no essential nature, no spontaneous being, of the body; social forces permeate it right from the beginning. The body is at once a target for new biological and communicational technologies, a site of political conflict, and a limit point at which ideological oppositions collapse. (134)

Science fiction can be seen as a warning of what might happen when science goes too far. Biotechnological cures for disabilities can result in horrifying mutations (The Amazing Spiderman, 2012), Cyborgs can revolt (I, Robot, 2004), clones can overthrow the system (The Island, 2005) and economics can determine whether you live or die (Repo Men, 2010). Science fiction always sees trouble with biotechnology, it is never a perfect advancement for humanity but always a precarious and dangerous relationship, which threatens to go wrong at every turn and disrupt the balance of power between human and machine. Machines have now made ambiguous the difference between natural and artificial, mind and body. “Our machines are
disturbingly lively, and we ourselves frighteningly inert‖ (Haraway 176). The scope of biotechnology is so great that it invokes both fear and awe, seen in fictional representations as massive bodies that overpower humans (Springer 306). The futurology which now pervades our cultural products ensures a growing array of scientifically plausible futures to foster science fiction narratives.

Although science fiction films were being made as far back as 1926 when Fritz Lang’s *Metropolis* articulated the fear of technology getting out of control, it could be said that the science fiction genre is more relevant now than ever, with the massive leaps in biotechnology and the grasp of science reaching ever further. Interrogations of such narratives can help us to understand contemporary experiences of scientific and technological advances. Scientific advances such as organ transplantation, stem cell science and even blood donation require and create new sets of social relations as well as generating new ideas about what constitutes life (Rose 17).

Science fiction repeatedly features disabled characters who are “fixed” by technology; Robocop is remade, Anakin Skywalker gains an exoskeleton which allows him the use of legs and arms, the Six Million Dollar Man is engineered to have super-ability, Iron Man forges a heart replacement; again and again science and technology seem to have the solutions for those whose bodies are imperfect. The reification of science and technology combined with the less than perfect body of the hero place such films in the service of an ableist agenda; scientific progress is thus shown as engaged in the modification and “repair” of human beings.

In the future that science fiction portrays, “abnormal” bodies are excluded from the realm of the active subject; if their bodies are “fixable” society projects expectations of repair at any cost. Contemporary films such as *Repo Men* (2010) warn of a monstrous future devoid of privacy and laden with control. Featuring bodies which are effectively colonized by power structures, corporate interests come to dictate the choices of humans. The internal life of man and his options are dubiously merged with capitalist power structures.

*Repo Men* (2010) enacts the nightmare of a capital-centered future where organs can be bought at a high price. Set in 2025, a corporation called “The Union” has perfected mechanical organs to replace diseased or damaged ones. If a customer falls behind or reneges on payments, “repo men” are sent to reclaim the “artiforg” (artificial organ) from the body. The procedure is immediate and primitive, frequently resulting in the death of the customer. Remy and his partner Jake are considered the best of the Union’s repo men. The Union is profit driven, having long term payment “options” which tie in consumers for most of their life.

Remy: My job is simple. Can’t pay for your car, the bank takes it back. Can’t pay for your house, the bank takes it back. Can’t pay for your liver, well, that’s where I come in.
In this imagined future, the ownership of capital is a prerequisite to harvest the power of science and technology. Families huddle in the corporation’s offices to discuss their financial options. The suggestion is that self-repair and self-care is the duty of the family man or woman and thus their options are predetermined – they will commit to whatever cost necessary in order to preserve the nuclear family unit.

Remy: He’ll sign it. Everybody signs it. (Sapochnik, Repo Men)

Images of computerized diagnostics seem to hold the valuable information about possible cures; the medical gaze now married to technological advances, which, in turn, are linked to a payment grid and a seemingly life-long financial commitment to the corporation. Social and familial stability in this way depend on individual solutions which incur payment plans. The characters’ need to self-regulate, and as such be effective members of the population, is informed by the ideology of individualism and simultaneously, it reflects the biopower which Foucault spoke of. These organs are tracked and monitored and hence, surveillance is endorsed by the powerful elite as a method of control and regulation. Science, in the hands of the elite, is a means of amassing capital while simultaneously controlling the populace, as the “repo men” extract devices and life from the non-compliant customers. The corporation is a shadowy organization; a faceless giant whose only aim is to feed profit to unseen investors. In this scenario, biotechnology is a commodity, a tool of capitalism, keeping the masses enslaved. Repo Men illustrates the “vital politics” of our time, characterized by Rose as

neither delimited by the poles of illness and health, nor focused on eliminating pathology to protect the destiny of the nation. Rather, it is concerned with our growing capacities to control, manage, engineer, reshape, and modulate the very vital capacities of human beings as living creatures. (3)

Repo Men enacts this vital politics, placing individualism, normalization and medicalization in a complex web of familial, financial and moral duty. The repo men themselves become the reapers of financial retribution, performing corporate discipline at the most intimate level. In this way the film is a performance of Foucauldian biopower.

Ex Machina (2015) concerns the creation of life; a robot becomes sentient, imitating life and learning to adapt to the human world, ultimately out-smarting her creator. The film’s title refers to the ancient literary tradition of deus ex machina (God from the machine); a person that is introduced into a situation and provides a contrived solution to an apparently insoluble difficulty. Ex Machina, (from the machine) suggests that the artificially created person may surpass the limits of human intelligence, learning exponentially to solve material problems. The film questions the term “human,” illustrating the ongoing evolution of life forms. If we look back to the birth of the clinic and forward to increasing intervention and machination, we may see that, as Rose says, “we do not stand at a unique moment in the unfolding of a single history, but in the midst of multiple histories” (252).

“Machine” beings are now open to examination and classification, diagnosis and, if necessary, adjustment or repair. Clinical observation in the case of a humanoid, takes the form of the “Turing test.” The test serves a diegetic purpose, bringing the programmer Caleb to examine the humanoid robot Ava.

Nathan: Because if the test is passed, you are dead centre of the greatest scientific event in the history of man.
Caleb: If you’ve created a conscious machine, it’s not the history of man. That’s the history of gods. (Ex Machina)

The Turing test, developed by Alan Turing in 1950, examines a machine’s ability to exhibit intelligent behaviour indistinguishable from that of a human being. Such behaviour is of course dependent on the ideology of normalcy; the normalization of behaviour, thoughts and patterns as well physical normalcy. The importance of Turing test is tantamount to the success of the humanoid robot as a scientific creation. Reinforcing the ideological frames of what is “normal,” the test seeks to ascribe a range of normal responses. We may see the Turing test as a new form of the “medical gaze,” the biotechnical version of a clinician’s examination. The film in this way colludes with the traditional notion of science as a rational and measured discipline, capable of predictable and highly managed “solutions.” In this way, is the *deus ex machina* a solution to the vagaries of the human body? The perfectly traditionally attractive appearances of all of Nathan’s robots would suggest so. Yet in true science fiction tradition, the science gets out of control; Ava tricks Nathan and Caleb, trapping them inside the building and escaping to a new life in the city. Free to run amok in the metropolis, we are left to wonder what havoc she may wreak as a modern day Frankenstein’s monster.

This vision of the created being is inherently terrifying, rather than showing any positive potential of science. Though this Frankenstein-esque machine develops the intelligence to escape from her creator, showing what Braidotti might term autoposis – the capability of maintaining and reproducing itself – Ava’s escape is depicted as an act of cunning and inherent evil, as illustrated by the scene of the injured orphan-man Caleb trapped inside Nathan’s prison as Ava escapes. While Braidotti writes of the machinic autoposis as “the threshold to many possible worlds” (94), the vision of scientific creation which *Ex Machina*’s proffers is one of terror.

**Conclusion**

Notions of what exactly constitutes human life are arguably now open to interrogation. As contemporary Hollywood film is seen to narrate the concerns of the audience, the “brave new world” of medical and scientific possibilities has become a central theme. In contemporary science fiction narratives, scientific solutions to the vagaries of the human form are bound up with the ownership of capital and the enactment of self-drive. This interplay of economics with science illustrates science fiction’s continued concern with the power structures of the future, while reiterating that those whose control science, control life.

The ideologies of medical science, which may be traced back to the birth of modern medicine in the eighteenth century, are now implicated in the new discourses of biotechnology. Foucault’s theories of biopower, of compulsory self-regulation, of control by seeing and knowing, are eminently useful for examining the emergent power of new scientific technologies. Both *Repo Men* and *Ex Machina*, in different ways, illustrate the centrality of classification, intervention, optimization and control which are central to biopower.

**Works Cited**


**Films Cited**

*The Fly*. Dir. Cronenberg, David. Twentieth Century Fox Film Corporation, 1986. Film.
*I Robot*. Dir. Proyas, Alex. Twentieth Century Fox Film Corporation, 2004. Film.
*Iron Man 3*. Dir. Black, Shane. Walt Disney Motion Pictures, 2013. Film.
*Metropolis*. Dir. Lang, Fritz. Paramount, 1927. Film.
*Robocop*. Dir. Padhilha, Jose. Twentieth Century Fox Film Corporation, 2014. Film.